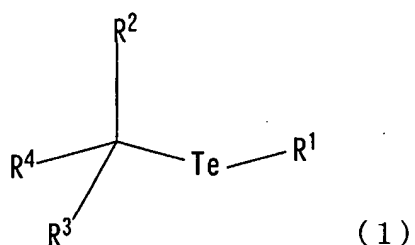


Amendments to the Claims

1. (Currently amended) A process for producing a living radical polymer which comprises polymerizing a vinyl monomer in the presence of an organotellurium compound represented by the formula (1), an azo type polymerization initiator and a ditelluride compound represented by the formula (2) at a polymerization temperature of 20 to 60°C

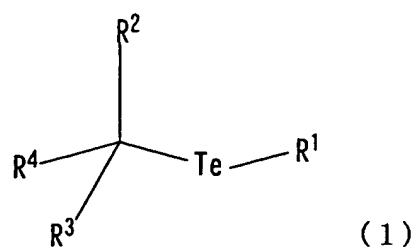


wherein R^1 is C_1 - C_8 alkyl, aryl, substituted aryl or an aromatic heterocyclic group, R^2 and R^3 are each a hydrogen atom or C_1 - C_8 alkyl, and R^4 is aryl, substituted aryl, an aromatic heterocyclic group, acyl, oxycarbonyl or cyano,



wherein R^1 is the same as above, to obtain a living radical polymer having a molecular weight distribution of 1.05 to 1.50.

2. (Previously presented) A living radical polymer having a molecular weight distribution of 1.05 to 1.50 produced by polymerizing a vinyl monomer in the presence of an organotellurium compound represented by the formula (1), an azo type polymerization initiator and a ditelluride compound represented by the formula (2)

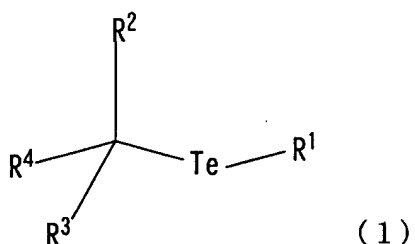


wherein R^1 is C_1 - C_8 alkyl, aryl, substituted aryl or an aromatic heterocyclic group, R^2 and R^3 are each a hydrogen atom or C_1 - C_8 alkyl, and R^4 is aryl, substituted aryl, an aromatic heterocyclic group, acyl, oxycarbonyl or cyano,



wherein R^1 is the same as above.

3. (Previously presented) A mixture of an organotellurium compound represented by the formula (1), an azo type polymerization initiator and a ditelluride compound represented by the formula (2)



wherein R^1 is C_1 - C_8 alkyl, aryl, substituted aryl or an aromatic heterocyclic group, R^2 and R^3 are each a hydrogen atom or C_1 - C_8 alkyl, and R^4 is aryl, substituted aryl, an aromatic heterocyclic group, acyl, oxycarbonyl or cyano,



wherein R^1 is the same as above.